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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,479	10/30/2000	Vance Bergeron	8439.004.USCP00	6625
77213	7590	12/02/2009		
Novak Druce + Quigg, LLP 1300 Eye Street, NW, Suite 1000 Suite 1000, West Tower Washington, DC 20005			EXAMINER	
			CHEUNG, WILLIAM K	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			12/02/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/698,479	<b>Applicant(s)</b> BERGERON ET AL.	
	<b>Examiner</b> WILLIAM K. CHEUNG	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-15,17-41 and 43-48 is/are pending in the application.
- 4a) Of the above claim(s) 19-32 and 34-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-15,17,18,33 and 43-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The examiner acknowledges the amendment and IDS filed October 29, 2009. Claims 1-4, 6-15, 17-41, 43-48 are pending. Regarding the IDS filed October 29, 2009, the cited office actions in the IDS are not considered prior art since the date do not meet the requirement as prior art. Applicants should submit the IDS with the references cited in the office action in the 1449 form.
2. In view of the amendment filed October 29, 2009, the objection of claim 24 due to minor issues has been withdrawn.
3. In view of new issues introduced by the IDS filed October 29, 2009, the allowability of claims 1-4, 6-15, 17-23, 25-41, and 43-48 is withdrawn. Further, the restriction set forth December 10, 2004 is reinstated. Claims 1-4, 6-15, 17-41, 43-48 are pending. Claims 19-23, 34-41 are drawn to non-elected subject matter. Claims 1-4, 6-15, 17, 18, 33, 43-48 are examined with merit.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-4, 6-15, 17, 18, 33, 43-48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McCall (US 5,277,899) or Li et al. (US 5,580,819).

McCall discloses a composition comprising a terpolymer comprising three polymers (referring to as the monomers from which they can be derived), (col. 12, lines 22-30). The cationic monomers such as dimethylaminoethyl (meth)acrylate (DMAM) is the applicants' claimed cationic monomer unit A, (col.12, lines 58-59). The anionic monomers such as hydroxyethyl (meth)acrylate (HEA or HEMA) and unsaturated (meth)acrylic acid monomeric units are readable on the claimed monomeric units B and C in the present claims. McCall discloses that the preferred B monomers include a mixture of an acrylic acid and dimethylaminoethyl methacrylate, (col. 17, lines 5-8). Any

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combinations of monomeric units with or without additional hydrophobic and/or hydrophilic monomer units having low or high polarity, which can provide hair setting benefits, are acceptable for the formulation of a hair setting composition in McCall's invention, (col. 12, lines 7-21). The cationic monomer such as a dimethylaminoethyl (meth)acrylate can be present in the amount of up to about 98% of the total monomers in the copolymer, (col. 16, line 35). The claimed block copolymer is readable in McCall's invention.

Li et al. disclose a coating composition including an organic polymer, claim 12 at column 24. An organic polymer includes hydroxyalkyl (meth)acrylate, (meth)acrylic acid and amino alkyl methacrylates, (col. 2 line 60 through col. 3, line 4). The monomer unit of 2- (dimethylamino)ethyl methacrylate is the applicants' claimed unit A. The monomer unit of 2- hydroxyethyl acrylate is the applicants' claimed unit B. The monomer unit of (meth)acrylic acid is applicants' claimed unit C, (col. 12, example 1). Li et al. disclose a process for producing an organic polymer wherein the components are charged into the reactor vessel in a continuous manner, (col. 13, lines 15-18). Therefore, the recited monomers are polymerized for producing a specified block polymer. The obtained film forming polymer has a number average molecular weight" of between about 500 and about 1,000,000, (col. 5, lines 34-36).

The references to McCall and Li et al. do not positively disclose a charge density properties at a specific pH being claimed. However, it is reasonable to presume that this property would possess the same characteristic in the composition in McCall's invention or Li' invention in view of substantially materially identical composition. Therefore, it is a

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burden on the applicants to provide the difference in order to overcome this rejection under *In re Fitzgerald* 205 USPQ 594. A pH and a molecular weight of a block polymer is either met by the references or rendered prima facie obvious in view of the identical block polymer units formulation. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM K. CHEUNG whose telephone number is (571)272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William K Cheung/  
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.  
Primary examiner  
November 25, 2009